

Appl. No. 10/016,114  
Amdt. dated November 8, 2005  
Reply to Office action of August 8, 2005  
Page 5

### **REMARKS**

In accordance with the forgoing, claims 1, 9, 11, 12, 20 and 21 have been amended and claims 2-8, 10, 13, 15-17 and 22 have been canceled without prejudice or disclaimer of the subject matter contained therein. Claims 1, 9, 11, 12, 14, 18-21, 23 and 24 remain pending and under consideration.

#### **I. Claim Rejections – 35 USC§ 103**

Claims 1, 3-12, and 14-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,403,292 to Ju ("Ju") in view of U.S. Patent No. 6,905,458 to Choay et al. ("Choay"). The Examiner's rejection is respectfully traversed.

The inventors of the present invention have found that while it was previously known to form a guide catheter using a material having properties causing it to just be radio-opaque, or to form a guide catheter using a material having properties causing it to just be echogenic, no known catheter has previously been developed that was both radio-opaque and echogenic that still maintained properties associated with the known barium sulfate loading of the catheter, with the biocompatibility of the catheter, with extrusion capabilities associated with forming the catheter, along with the physical handling properties of the catheter, such as torqueability, stiffness, etc. The inventors have performed extension experimentation to develop a catheter having the necessary loading of materials that enables the catheter to be both radio-opaque and echogenic, while maintaining the current mechanical and physical properties.

Therefore, the present invention is directed to a guide catheter having a distal tip that is formed of a material causing the catheter to be both radio-opaque and echogenic wherein jet-milled tungsten carbide particles are distributed within the polymeric material of the first material between approximately 70 to 75 percent by weight and have an average diameter approximately less than or equal to 500 nanometers, as set forth in independent claims 1, 12, 20 and 24. Given these features, the present invention enables the catheter to be both radio-

Appl. No. 10/016,114  
Amndt. dated November 8, 2005  
Reply to Office action of August 8, 2005  
Page 6

opaque and echogenic, while maintaining the current mechanical and physical properties, i.e., slittability, maneuverability and atraumatic use.

As pointed out by the Examiner, Ju does not teach a catheter including echogenic and radio-opaque material. The Examiner relies on Choay for this feature. However, Choay merely teaches the use of an echogenic material 5 concentrated at a distal portion of the catheter. Since the device in Choay is utilized to remove material from genital organs, Choay is not concerned with having to slit the catheter and would not have any motivation to consider amounts of echogenic material utilized so that the catheter maintains is slittable feature. Therefore, neither Ju nor Choay, alone or in combination, teach or suggest a distal tip that is formed of a material causing the catheter to be both radio-opaque and echogenic wherein jet-milled tungsten carbide particles are distributed within the polymeric material of the first material between approximately 70 to 75 percent by weight and have an average diameter approximately less than or equal to 500 nanometers, as set forth in independent claims 1, 12, 20 and 24 of the present invention.

Therefore, claim 1 and claims 9 and 11 dependent thereon, independent claim 12 and claims 14, 18 and 19 dependent thereon, independent claim 20 and claims 21 and 23 dependent thereon, and independent claim 24 are patentably distinguishable from Ju and Choay. Accordingly, withdrawal of the rejection is respectfully requested.

Appl. No. 10/016,114  
Amdt. dated November 8, 2005  
Reply to Office action of August 8, 2005  
Page 7

## II. Conclusion

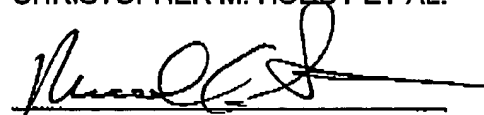
There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this Amendment, the Examiner is requested to telephone the undersigned attorney to attend to those matters.

Respectfully submitted,

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Date

  
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